Neutral Tandem requests disconnection of the subject facility or an alternative term that Verizon offers under its interstate special access tariff for the subject facility or service.

1.7.2.2.1 In the case of Dark Fiber Transport (there being no analogous service under Verizon's access tariffs), the monthly recurring charges that Verizon may charge, and that Neutral Tandem shall be obligated to pay, for each circuit shall be shall be the charges for the commercial service that Verizon, in its sole discretion, determines to be analogous to the subject Dark Fiber Transport and, unless otherwise agreed in writing by the Parties, Verizon may, without further notice, disconnect the subject dark fiber facility within thirty (30) days of the date on which the dispute is resolved in Verizon's favor. In any case where Neutral Tandem, within thirty (30) days of the date on which the dispute is resolved in Verizon's favor, submits a valid ASR for a "lit" service to replace the subject Dark Fiber Transport facility, Verizon shall continue to provide the Dark Fiber Transport facility at the rates specified above, but only for the duration of the standard interval for installation of the "lit" service.

1.7.2.3 Notwithstanding any other provision of the Agreement, Verizon may reject a Neutral Tandem order for a TRRO Certification Element without first seeking dispute resolution: (a) in any case where Neutral Tandem's order conflicts with a provision of a Verizon Tariff, (b) in any case where Neutral Tandem's order conflicts with a non-impaired UNE Wire Center designation set forth in a Wire Center List that Verizon has made available to Neutral Tandem by notice and/or by publication on Verizon's wholesale website, (c) in any case where Neutral Tandem's order conflicts with a non-impaired UNE Wire Center designation that the Commission or the FCC has ordered or approved or that has otherwise been confirmed through previous dispute resolution (regardless of whether Neutral Tandem was a party to such dispute resolution), or (d) as otherwise permitted under the Federal Unbundling Rules (including, but not limited to, upon a determination by the Commission, the FCC, or a court of competent jurisdiction that Verizon may reject orders for TRRO Certification Elements without first seeking dispute resolution).

1.8 Limitation With Respect to Replacement Arrangements. Notwithstanding any other provision of this Agreement, any negotiations regarding any UNE-replacement arrangement, facility, service or the like that Verizon is not required to provide under the Federal Unbundling Rules (including without limitation any arrangement, facility, service or the like that Verizon offers under an access tariff) shall be deemed not to have been conducted pursuant to the Agreement, 47 U.S.C. § 252(a)(1), or 47 C.F.R. Part 51, and shall not be subject to arbitration or

other requirements under to 47 U.S.C. § 252(b). Any reference in this Attachment to Verizon's provision of a arrangement, facility, service or the like that Verizon is not required to provide under the Federal Unbundling Rules is solely for the convenience of the Parties and shall not be construed to require or permit: (a) arbitration pursuant to 47 U.S.C. § 252(b) of the rates, terms, or conditions upon which Verizon may provide such arrangement, facility, service or the like, or (b) application of 47 U.S.C. § 252 in any other respect.

2. Verizon's Provision of Network Elements

Subject to the conditions set forth in Section 1 of this Attachment, in accordance with, but only to the extent required by, the Federal Unbundling Rules, Verizon shall provide Neutral Tandem access to the following:

2.1 Loops, as set forth in Section 3 of this Attachment;

2.2 Line Splitting (also referred to as "Loop Sharing"), as set forth in Section 4 of this Attachment;

2.3 [Intentionally Left Blank];

2.4 Sub-Loops, as set forth in Section 6 of this Attachment;

2.5 Sub-Loop for Multiunit Tenant Premises Access, as set forth in Section 7 of this Attachment;

2.6 Dark Fiber Transport (sometimes referred to as "Dark Fiber IOF"), as set forth in Section 8 of this Attachment;

2.7 Network Interface Device, as set forth in Section 9 of this Attachment;

2.8 [Intentionally Left Blank];

2.9 Dedicated Transport (may also be referred to as "Interoffice Transmission Facilities") (or "IOF"), as set forth in Section 11 of this Attachment;

2.10 [Intentionally Left Blank];

2.11 Operations Support Systems, as set forth in Section 13 of this Attachment; and

2.12 Other UNEs in accordance with Section 14 of this Attachment.

3. Loop Transmission Types

3.1 Subject to the conditions set forth in Section 1 of this Attachment, Verizon shall allow Neutral Tandem to access Loops unbundled from local switching and local transport, in accordance with this Section 3 and the rates and charges provided in the Pricing Attachment. Verizon shall allow Neutral Tandem access to Loops in accordance with, but only to extent required by, the Federal Unbundling Rules. Subject to the foregoing and the provisions regarding FTTP Loops, in Section 3.5 below, and Hybrid Loops, in Section 3.6 below, the available Loop types are as set forth below:

3.1.1 "2 Wire Analog Voice Grade Loop" or "Analog 2W" provides an effective 2-wire channel with 2-wire interfaces at each end that is suitable for the transport of analog Voice Grade (nominal 300 to 3000 Hz) signals and loop-start signaling. This Loop type is more fully described in Verizon Technical Reference (TR)-72565, as revised from

time-to-time. If "Customer-Specified Signaling" is requested, the Loop will operate with one of the following signaling types that may be specified when the Loop is ordered: loop-start, ground-start, loop-reverse-battery, and no signaling. Customer specified signaling is more fully described in Verizon TR-72570, as revised from time-to-time. Verizon will not build new facilities or modify existing facilities except to the extent required in Section 17 of this Attachment.

3.1.2 "4-Wire Analog Voice Grade Loop" or "Analog 4W" provides an effective 4-wire channel with 4-wire interfaces at each end that is suitable for the transport of analog Voice Grade (nominal 300 to 3000 Hz) signals. This Loop type will operate with one of the following signaling types that may be specified when the Loop is ordered: loop-start, ground-start, loop-reverse-battery, duplex, and no signaling. This Loop type is more fully described in Verizon TR-72570, as revised from time-to-time. Verizon will not build new facilities or modify existing facilities except to the extent required in Section 17 of this Attachment.

3.1.3 "2-Wire ISDN Digital Grade Loop" or "BRI ISDN" provides a channel with 2-wire interfaces at each end that is suitable for the transport of 160 kbps digital services using the ISDN 2B1Q line code. This Loop type is more fully described in American National Standards Institute (ANSI) T1.601-1998 and Verizon TR 72575, as revised from time-to-time. In some cases loop extension equipment may be necessary to bring the line loss within acceptable levels. Verizon will provide loop extension equipment only upon request. A separate charge will apply for loop extension equipment. The 2-Wire ISDN Digital Grade Loop is available only in the former Bell Atlantic Service Areas. In the former GTE Service Areas only, Neutral Tandem may order a 2-Wire Digital Compatible Loop using 2-wire ISDN ordering codes to provide similar capability. Verizon will not build new facilities or modify existing facilities except to the extent required in Section 17 of this Attachment.

3.1.4 "2-Wire ADSL-Compatible Loop" or "ADSL 2W" provides a channel with 2-wire interfaces at each end that is suitable for the transport of digital signals up to 8 Mbps toward the Customer and up to 1 Mbps from the Customer. This Loop type is more fully described in Verizon TR-72575, as revised from time-to-time. ADSL-Compatible Loops will be available only where existing copper facilities are available and meet applicable specifications. Verizon will not build new facilities or modify existing facilities except to the extent required in Sections 3.2 or 17 of this Attachment. The upstream and downstream ADSL power spectral density masks and dc line power limits in Verizon TR 72575, as revised from time-to-time, must be met. The 2-Wire ADSL-Compatible Loop is available only in the former Bell Atlantic Service Areas. In the former GTE Service Areas only, Neutral Tandem may order a 2-Wire Digital Compatible Loop using 2-wire ADSL ordering codes to provide similar capability.

3.1.5 "2-Wire HDSL-Compatible Loop" or "HDSL 2W" consists of a single 2-wire non-loaded, twisted copper pair that meets the carrier serving area design criteria. This Loop type is more fully described in Verizon TR-72575, as revised from time-to-time. The HDSL power spectral density mask and dc line power limits referenced in Verizon TR 72575, as revised from time-to-time, must be met. 2-Wire HDSL-Compatible Loops will be provided only where existing facilities are available and

can meet applicable specifications. The 2-Wire HDSL-Compatible Loop is available only in the former Bell Atlantic Service areas. In the former GTE Service Areas only, Neutral Tandem may order a 2-Wire Digital Compatible Loop using 2-Wire HDSL ordering codes to provide similar capability. Verizon will not build new facilities or modify existing facilities except to the extent required in Sections 3.2 or 17 of this Attachment.

3.1.6 "4-Wire HDSL-Compatible Loop" or "HDSL 4W" consists of two 2-wire non-loaded, twisted copper pairs that meet the carrier serving area design criteria. This Loop type is more fully described in Verizon TR-72575, as revised from time-to-time. The HDSL power spectral density mask and dc line power limits referenced in Verizon TR 72575, as revised from time-to-time, must be met. 4-Wire HDSL-Compatible Loops will be provided only where existing facilities are available and can meet applicable specifications. Verizon will not build new facilities or modify existing facilities except to the extent required in Sections 3.2 or 17 of this Attachment.

3.1.7 "2-Wire IDSL-Compatible Metallic Loop" consists of a single 2-wire non-loaded, twisted copper pair that meets revised resistance design criteria. This Loop is intended to be used with very-low band symmetric DSL systems that meet the Class 1 signal power limits and other criteria in the T1E1.4 loop spectrum management standard (T1E1.4/2000-002R3) and are not compatible with 2B1Q 160 kbps ISDN transport systems. The actual data rate achieved depends upon the performance of CLEC-provided modems with the electrical characteristics associated with the loop. This Loop type is more fully described in T1E1.4/2000-002R3, as revised from time-to-time. This loop cannot be provided via UDLC. The 2-Wire IDSL-Compatible Metallic Loop is available only in the former Bell Atlantic Service Areas. In the former GTE Service Areas only, Neutral Tandem may order a 2-Wire Digital Compatible Loop using ISDN ordering codes to provide similar capability. Verizon will not build new facilities or modify existing facilities except to the extent required in Sections 3.2 or 17 of this Attachment.

3.1.8 "2-Wire SDSL-Compatible Loop", is intended to be used with low band symmetric DSL systems that meet the Class 2 signal power limits and other criteria in the T1E1.4 loop spectrum management standard (T1E1.4/2000-002R3). This Loop consists of a single 2-wire non-loaded, twisted copper pair that meets Class 2 length limit in T1E1.4/2000-002R3. The data rate achieved depends on the performance of the CLEC-provided modems with the electrical characteristics associated with the loop. This Loop type is more fully described in T1E1.4/2000-002R3, as revised from time-to-time. The 2-Wire SDSL-Compatible Loop is available only in the former Bell Atlantic Service Areas. In the former GTE Service Areas only, Neutral Tandem may order a 2-Wire Digital Compatible Loop to provide similar capability. SDSL-compatible local loops will be provided only where facilities are available and can meet applicable specifications. Verizon will not build new facilities or modify existing facilities except to the extent required in Sections 3.2 or 17 of this Attachment.

3.1.9 "4-Wire 56 kbps Loop" is a 4-wire Loop that provides a transmission path that is suitable for the transport of digital data at a synchronous

rate of 56 kbps in opposite directions on such Loop simultaneously. A 4-Wire 56 kbps Loop consists of two pairs of non-loaded copper wires with no intermediate electronics or it consists of universal digital loop carrier with 56 kbps DDS dataport transport capability. Verizon shall provide 4-Wire 56 kbps Loops to Neutral Tandem in accordance with, and subject to, the technical specifications set forth in Verizon TR-72575, as revised from time-to-time. Verizon will not build new facilities or modify existing facilities except to the extent required in Section 17 of this Attachment.

3.1.10 "DS1 Loops" provide a digital transmission channel suitable for the transport of 1.544 Mbps digital signals. This Loop type is more fully described in Verizon TR 72575, as revised from time to time. The DS1 Loop includes the electronics necessary to provide the DS1 transmission rate. If, at the requested installation date, the electronics necessary to provide the DS1 transmission rate are not available for the requested DS1 Loop, then Verizon will not install new electronics except to the extent required in Section 17 of this Attachment. Verizon will not build new facilities and will not modify existing facilities except to the extent required in Section 17 of this Attachment. If the electronics necessary to provide Clear Channel (B8ZS) signaling are at the requested installation date available for a requested DS1 Loop, upon request by Neutral Tandem, the DS1 Loop will be furnished with Clear Channel (B8ZS) signaling. Verizon will not install new electronics to furnish Clear Channel (B8ZS) signaling. For purposes of provisions implementing any right Verizon may have to cease providing unbundled access to DS1-capacity Loops under the TRRO pursuant to Section 1 of this Attachment, the term "DS1 Loop" further includes any type of Loop described in Section 3.1 of the Network Elements Attachment that provides a digital transmission channel suitable for the transport of 1.544 Mbps digital signals, regardless of whether the subject Loop meets the specific definition of a DS1 Loop set forth in this section.

3.1.11 "DS3 Loops" will support the transmission of isochronous bipolar serial data at a rate of 44.736 Mbps (the equivalent of 28 DS1 channels). This Loop type is more fully described in Verizon TR 72575, as revised from time to time. The DS3 Loop includes the electronics necessary to provide the DS3 transmission rate. If, at the requested installation date, the electronics necessary to provide the DS3 transmission rate are not available for the requested DS3 Loop, then Verizon will not install new electronics except to the extent required in Section 17 of this Attachment. Verizon will not build new facilities and will not modify existing facilities except to the extent required in Section 17 of this Attachment. For purposes of provisions implementing any right Verizon may have to cease providing unbundled access to DS3-capacity loops under the TRRO pursuant to Section 1 of this Attachment, the term "DS3 Loop" further includes any type of Loop described in Section 3.1 of the Network Elements Attachment that provides a digital transmission channel suitable for the transport of 44.736 Mbps digital signals, regardless of whether the subject Loop meets the specific definition of a DS3 Loop set forth in this section.

3.1.12 In the former Bell Atlantic Service Areas only, "Digital Designed Loops" are comprised of designed loops that meet specific Neutral Tandem requirements for metallic loops over 18k ft. or for conditioning of ADSL,

HDSL, SDSL, IDSL, or BRI ISDN Loops. "Digital Designed Loops" may include requests for:

3.1.12.1 a 2W Digital Designed Metallic Loop with a total loop length of 18k to 30k ft., unloaded, with the option to remove bridged tap;

3.1.12.2 a 2W ADSL Loop of 12k to 18k ft. with an option to remove bridged tap (such a Loop with the bridged tap so removed shall be deemed to be a "2W ADSL Compatible Loop");

3.1.12.3 a 2W ADSL Loop of less than 12k ft. with an option to remove bridged tap (such a Loop with the bridged tap so removed shall be deemed to be a "2W ADSL Compatible Loop");

3.1.12.4 a 2W HDSL Loop of less than 12k ft. with an option to remove bridged tap:

3.1.12.5 a 4W HDSL Loop of less than 12k ft with an option to remove bridged tap;

3.1.12.6 a 2 W Digital Designed Metallic Loop with Verizon-placed ISDN loop extension electronics;

3.1.12.7 a 2W SDSL Loop with an option to remove bridged tap; and

3.1.12.8 a 2W IDSL Loop of less than 18k ft. with an option to remove bridged tap;

3.1.13 Verizon shall make Digital Designed Loops available Neutral Tandem at the rates as set forth in the Pricing Attachment.

3.1.14 In the former GTE Service Areas only, "Conditioned Loops" are comprised of designed loops that meet specific Neutral Tandem requirements for metallic loops over 12k ft. or for conditioning of 2-wire or 4-wire digital or BRI ISDN Loops. "Conditioned Loops" may include requests for:

3.1.14.1 a 2W Digital Loop with a total loop length of 12k to 30k ft., unloaded, with the option to remove bridged tap (such a Loop, unloaded, with bridged tap so removed shall be deemed to be a "2W Digital Compatible Loop");

3.1.14.2 a 2W Digital Loop of 12k to 18k ft. with an option to remove load coils and/or bridged tap (such a Loop with load coils and/or bridged tap so removed shall be deemed to be a "2W Digital Compatible Loop");

3.1.14.3 a 2W Digital or 4W Digital Loop of less than 12k ft. with an option to remove bridged tap (such a 2W Loop with bridged tap so removed shall be deemed to be a "2W Digital Compatible Loop");

3.1.14.4 a 2W Digital Loop with Verizon-placed ISDN loop extension electronics (such a Loop with ISDN loop extension electronics so placed shall be deemed to be a "2W Digital Compatible Loop").

3.1.15 Verizon shall make Conditioned Loops available to Neutral Tandem at the rates as set forth in the Pricing Attachment.

3.2 The following ordering procedures shall apply to xDSL Compatible Loops, Digital Designed and Conditioned Loops:

3.2.1 Neutral Tandem shall place orders for xDSL Compatible Loops, Digital Designed and Conditioned Loops by delivering to Verizon a valid electronic transmittal Service Order or other mutually agreed upon type of Service Order. Such Service Order shall be provided in accordance with industry format and specifications or such format and specifications as may be agreed to by the Parties.

3.2.2 In former Bell Atlantic Service Areas, Verizon is conducting a mechanized survey of existing Loop facilities, on a Central Office by Central Office basis, to identify those Loops that meet the applicable technical characteristics established by Verizon for compatibility with xDSL Compatible or BRI ISDN signals. The results of this survey will be stored in a mechanized database and made available to Neutral Tandem as the process is completed in each Central Office. Neutral Tandem must utilize this mechanized loop qualification database, where available, in advance of submitting a valid electronic transmittal Service Order for an xDSL Compatible or BRI ISDN Loop. Charges for mechanized loop qualification information are set forth in the Pricing Attachment. In former GTE Service Areas, Verizon provides access to mechanized xDSL loop qualification information to help identify those loops that meet applicable technical characteristics for compatibility with xDSL Services that the CLEC may wish to offer to its end user Customers. Neutral Tandem must access Verizon's mechanized loop qualification system through the use of the on-line computer interface at www.verizon.com/wise in advance of submitting a valid electronic transmittal Service Order for xDSL service arrangements. The loop qualification information provided by Verizon gives Neutral Tandem the ability to determine loop composition and loop length, and may provide other loop characteristics, when present, that may indicate incompatibility with xDSL Services such as load coils or Digital Loop Carrier. Information provided by the mechanized loop qualification system also indicates whether loop conditioning may be necessary. It is the responsibility of Neutral Tandem to evaluate the loop qualification information provided by Verizon and determine whether a loop meets Neutral Tandem requirements for xDSL Service, including determining whether conditioning should be ordered, prior to submitting an Order.

3.2.3 If the Loop is not listed in the mechanized database described in Section 3.2.2 of this Attachment, Neutral Tandem must request a manual loop qualification, where such qualification is available, prior to submitting a valid electronic Service Order for an xDSL Compatible or BRI ISDN Loop. In general, Verizon will complete a manual loop qualification request within three (3) Business Days, although Verizon may require additional time due to poor record conditions, spikes in demand, or other unforeseen events. The manual loop qualification process is currently available in the former Bell Atlantic Service Areas only.

3.2.4 If a query to the mechanized loop qualification database or manual loop qualification indicates that a Loop does not qualify (e.g., because

it does not meet the applicable technical parameters set forth in the Loop descriptions above), Neutral Tandem may request an Engineering Query, where available, as described in Section 3.2.7 of this Attachment, to determine whether the result is due to characteristics of the loop itself (e.g., specific number and location of bridged taps, the specific number of load coils, or the gauge of the cable).

3.2.5 Once a Loop has been pre-qualified, Neutral Tandem will submit a Service Order pursuant to Section 3.2.1 of this Attachment if it wishes to obtain the Loop.

3.2.5.1 If the Loop is determined to be xDSL Compatible and if the Loop serving the serving address is usable and available to be assigned as a xDSL Compatible Loop, Verizon will initiate standard Loop provisioning and installation processes, and standard Loop provisioning intervals will apply.

3.2.5.2 If the Loop is determined to be xDSL Compatible, but the Loop serving the service address is unusable or unavailable to be assigned as an xDSL Compatible Loop, Verizon will search the Customer's serving terminal for a suitable spare facility. If an xDSL Compatible Loop is found within the serving terminal, Verizon will perform a Line and Station Transfer (or "pair swap") whereby the Verizon technician will transfer the Customer's existing service from one existing Loop facility onto an alternate existing xDSL Compatible Loop facility serving the same location. Verizon performs Line and Station Transfers in accordance with the procedures developed in the DSL Collaborative in the State of New York, NY PSC Case 00-C-0127. Standard intervals do not apply when Verizon performs a Line and Station Transfer, and additional charges shall apply as set forth in the Pricing Attachment.

3.2.6 If Neutral Tandem submits a Service Order for an xDSL Compatible or BRI ISDN Loop that has not been prequalified, Verizon will query the Service Order back to Neutral Tandem for qualification and will not accept such Service Order until the Loop has been prequalified on a mechanized or manual basis. If Neutral Tandem submits a Service Order for an xDSL Compatible or BRI ISDN Loop that is, in fact, not compatible with the requested service (e.g. ADSL, HDSL etc.) in its existing condition, Verizon will respond back to Neutral Tandem with a "Nonqualified" indicator and with information showing whether the non-qualified result is due to the presence of load coils, presence of digital loop carrier, or loop length (including bridged tap).

3.2.7 Where Neutral Tandem has followed the prequalification procedure described above and has determined that a Loop is not compatible with xDSL technologies or BRI ISDN service in its existing condition, it may either request an Engineering Query, where available, to determine whether conditioning may make the Loop compatible with the applicable service; or if Neutral Tandem is already aware of the conditioning required (e.g., where Neutral Tandem has previously requested a qualification and has obtained loop characteristics), Neutral Tandem may submit a Service Order for a Digital Designed

Loop. Verizon will undertake to condition or extend the Loop in accordance with this Section 3.2 of this Attachment upon receipt of Neutral Tandem's valid, accurate and pre-qualified Service Order for a Digital Designed Loop.

3.2.8 The Parties will make reasonable efforts to coordinate their respective roles in order to minimize provisioning problems. In general, where conditioning or loop extensions are requested by Neutral Tandem, an interval of eighteen (18) Business Days will be required by Verizon to complete the loop analysis and the necessary construction work involved in conditioning and/or extending the loop as follows:

3.2.8.1 Three (3) Business Days will be required following receipt of Neutral Tandem's valid, accurate and pre-qualified Service Order for a Digital Designed or Conditioned Loop to analyze the loop and related plant records and to create an Engineering Work Order.

3.2.8.2 Upon completion of an Engineering Work Order, Verizon will initiate the construction order to perform the changes/modifications to the Loop requested by Neutral Tandem. Conditioning activities are, in most cases, able to be accomplished within fifteen (15) Business Days. Unforeseen conditions may add to this interval.

After the engineering and conditioning tasks have been completed, the standard Loop provisioning and installation process will be initiated, subject to Verizon's standard provisioning intervals.

3.2.9 If Neutral Tandem requires a change in scheduling, it must contact Verizon to issue a supplement to the original Service Order. If Neutral Tandem cancels the request for conditioning after a loop analysis has been completed but prior to the commencement of construction work, Neutral Tandem shall compensate Verizon for an Engineering Work Order charge as set forth in the Pricing Attachment. If Neutral Tandem cancels the request for conditioning after the loop analysis has been completed and after construction work has started or is complete, Neutral Tandem shall compensate Verizon for an Engineering Work Order charge as well as the charges associated with the conditioning tasks performed as set forth in the Pricing Attachment.

3.3 Conversion of Live Telephone Exchange Service to Analog 2W Loops.

3.3.1 The following coordination procedures shall apply to "live" cutovers of Verizon Customers who are converting their Telephone Exchange Services to Neutral Tandem Telephone Exchange Services provisioned over Analog 2W unbundled Local Loops ("Analog 2W Loops) to be provided by Verizon to Neutral Tandem:

3.3.1.1 Coordinated cutover charges shall apply to conversions of live Telephone Exchange Services to Analog 2W Loops. When an outside dispatch is required to perform a conversion, additional charges may apply. If Neutral Tandem does not request a coordinated cutover, Verizon will process Neutral Tandem's order as a new installation subject to applicable standard provisioning intervals.

3.3.1.2 Neutral Tandem shall request Analog 2W Loops for coordinated cutover from Verizon by delivering to Verizon a valid electronic Local Service Request ("LSR"). Verizon agrees to accept from Neutral Tandem the date and time for the conversion designated on the LSR ("Scheduled Conversion Time"), provided that such designation is within the regularly scheduled operating hours of the Verizon Regional CLEC Control Center ("RCCC") and subject to the availability of Verizon's work force. In the event that Verizon's work force is not available, Neutral Tandem and Verizon shall mutually agree on a New Conversion Time, as defined below. Neutral Tandem shall designate the Scheduled Conversion Time subject to Verizon standard provisioning intervals as stated in the Verizon CLEC Handbook, as may be revised from time to time. Within three (3) Business Days of Verizon's receipt of such valid LSR, or as otherwise required by the Federal Unbundling Rules, Verizon shall provide Neutral Tandem the scheduled due date for conversion of the Analog 2W Loops covered by such LSR.

3.3.1.3 Neutral Tandem shall provide dial tone at the Neutral Tandem collocation site at least forty-eight (48) hours prior to the Scheduled Conversion Time.

3.3.1.4 Either Party may contact the other Party to negotiate a new Scheduled Conversion Time (the "New Conversion Time"); provided, however, that each Party shall use commercially reasonable efforts to provide four (4) business hours' advance notice to the other Party of its request for a New Conversion Time. Any Scheduled Conversion Time or New Conversion Time may not be rescheduled more than one (1) time in a Business Day, and any two New Conversion Times for a particular Analog 2W Loop shall differ by at least eight (8) hours, unless otherwise agreed to by the Parties.

3.3.1.5 If the New Conversion Time is more than one (1) business hour from the original Scheduled Conversion Time or from the previous New Conversion Time, the Party requesting such New Conversion Time shall be subject to the following:

3.3.1.5.1 If Verizon requests to reschedule outside of the one (1) hour time frame above, the Analog 2W Loops Service Order Charge for the original Scheduled Conversion Time or the previous New Conversion Time shall be credited upon request from Neutral Tandem; and

3.3.1.5.2 If Neutral Tandem requests to reschedule outside the one (1) hour time frame above, Neutral Tandem shall be charged an additional Analog 2W Loops Service Order Charge for rescheduling the conversion to the New Conversion Time.

3.3.1.6 If Neutral Tandem is not ready to accept service at the Scheduled Conversion Time or at a New Conversion Time, as applicable, an additional Service Order Charge shall apply. If Verizon is not available or ready to perform the conversion within thirty (30) minutes of the Scheduled Conversion Time or New Conversion Time, as applicable, Verizon and Neutral Tandem will reschedule and, upon request from Neutral Tandem, Verizon will credit the Analog 2W Loop Service Order Charge for the original Scheduled Conversion Time.

3.3.1.7 The standard time interval expected from disconnection of a live Telephone Exchange Service to the connection of the Analog 2W Loops to Neutral Tandem is fifteen (15) minutes per Analog 2W Loop for all orders consisting of twenty (20) Analog 2W Loops or less. Orders involving more than twenty (20) Loops will require a negotiated interval.

3.3.1.8 Conversions involving LNP will be completed according to North American Numbering Council (NANC) standards, via the regional Number Portability Administration Center (NPAC).

3.3.1.9 If Neutral Tandem requires Analog 2W Loop conversions outside of the regularly scheduled Verizon RCCC operating hours, such conversions shall be separately negotiated. Additional charges (e.g. overtime labor charges) may apply for desired dates and times outside of regularly scheduled RCCC operating hours.

3.4 [Intentionally Left Blank].

3.5 FTTP Loops.

3.5.1 New Builds. Notwithstanding any other provision of the Agreement or any Verizon Tariff, Neutral Tandem shall not be entitled to obtain access to a FTTP Loop, or any segment thereof, on an unbundled basis when Verizon deploys such a Loop to the Customer premises of an end user that has not been served by any Verizon Loop other than a FTTP Loop.

3.5.2 Overbuilds. Notwithstanding any other provision of the Agreement or any Verizon Tariff, if (a) Verizon deploys an FTTP Loop to replace a copper Loop previously used to serve a particular end user's customer premises, and (b) Verizon retires that copper Loop and there are no other available copper Loops or Hybrid Loops for Neutral Tandem's provision of a voice grade service to that end user's customer premises, then in accordance with, but only to the extent required by, the Federal Unbundling Rules, Verizon shall provide Neutral Tandem with nondiscriminatory access on an unbundled basis to a transmission path capable of providing DS0 voice grade service to that end user's customer premises.

3.6 Hybrid Loops.

3.6.1 Packet Switched Features, Functions, and Capabilities. Notwithstanding any other provision of this Agreement or any Verizon

Tariff or SGAT, Neutral Tandem shall not be entitled to obtain access to the Packet Switched features, functions, or capabilities of any Hybrid Loop on an unbundled basis.

3.6.2 Broadband Services. Subject to the conditions set forth in Section 1 of this Attachment, when Neutral Tandem seeks access to a Hybrid Loop for the provision of "broadband services," as such term is defined by the FCC, then in accordance with, but only to the extent required by, the Federal Unbundling Rules, Verizon shall provide Neutral Tandem with unbundled access to the existing time division multiplexing features, functions, and capabilities of that Hybrid Loop, including DS1 or DS3 capacity (but only where impairment has been found to exist, which, for the avoidance of any doubt, does not include instances where Verizon is not required to provide unbundled access to a DS1 Loop or a DS3 Loop under Section 1 of this Attachment) to establish a complete time division multiplexing transmission path between the main distribution frame (or equivalent) in a Verizon End Office serving an end user to the demarcation point at the end user's Customer premises. This access includes access to all features, functions, and capabilities of the Hybrid Loop that are not used to transmit packetized information.

3.6.3 Narrowband Services. Subject to the conditions set forth in Section 1 of this Attachment, when Neutral Tandem seeks access to a Hybrid Loop for the provision to its Customer of "narrowband services," as such term is defined by the FCC, then in accordance with, but only to the extent required by, the Federal Unbundling Rules, Verizon shall, in its sole discretion, either (a) provide access to a spare home-run copper Loop serving that Customer on an unbundled basis, or (b) provide access, on an unbundled basis, to a DS0 voice-grade transmission path between the main distribution frame (or equivalent) in the end user's serving End Office and the end user's Customer premises, using time division multiplexing technology.

3.6.4 IDLC Hybrid Loops and Loops Provisioned via Loop Concentrator. Subject to the conditions set forth in Section 1 of this Attachment, if Neutral Tandem requests, in order to provide narrowband services, unbundling of a 2 wire analog or 4 wire analog Loop currently provisioned via Integrated Digital Loop Carrier (over a Hybrid Loop) or via Remote Switching technology deployed as a Loop concentrator Verizon shall, in accordance with but only to the extent required by the Federal Unbundling Rules, provide Neutral Tandem unbundled access to a Loop capable of voice-grade service to the end user Customer served by the Hybrid Loop.

3.6.4.1 Verizon will endeavor to provide Neutral Tandem with an existing copper Loop or a Loop served by existing Universal Digital Loop Carrier ("UDLC"). Standard recurring and non-recurring Loop charges will apply. In addition, a non-recurring charge will apply whenever a line and station transfer is performed.

3.6.4.2 If neither a copper Loop nor a Loop served by UDLC is available, Verizon shall, upon request of Neutral Tandem, provide unbundled access to a DS0 voice-grade transmission path between the main distribution frame (or equivalent) in the end user's serving End Office and the end

user's Customer premises via such technically feasible alternative that Verizon in its sole discretion may elect to employ. In addition to the rates and charges payable in connection with any unbundled Loop so provisioned by Verizon, Neutral Tandem shall be responsible for any of the following charges that apply in the event the technically feasible option involves construction, installation, or modification of facilities: (a) an engineering query charge for preparation of a price quote; (b) upon Neutral Tandem's submission of a firm construction order, an engineering work order nonrecurring charge; and (c) construction charges, as set forth in the price quote. If the order is cancelled by Neutral Tandem after construction work has started, Neutral Tandem shall be responsible for cancellation charges and a pro-rated charge for construction work performed prior to the cancellation.

3.6.4.3 Verizon may exclude its performance in connection with providing unbundled Loops pursuant to this Section 3.6.4 from standard provisioning intervals and performance measures and remedies, if any, contained in the Agreement or elsewhere.

4. Line Splitting (also referred to as "Loop Sharing")

4.1 Line Splitting is a process in which one CLEC provides narrowband voice service over the low frequency portion of an unbundled copper Loop obtained from Verizon (such CLEC may be referred to as the "VLEC") and a second CLEC provides digital subscriber line service over the high frequency portion of that same Loop (such CLEC may be referred to as the "DLEC"). Line Splitting is accomplished through the use of a splitter collocated at the Verizon central office where the Loop terminates into a distribution frame or its equivalent.

4.2 Subject to the conditions set forth in Section 1 of this Attachment, Neutral Tandem may engage in Line Splitting, in accordance with this Section 4 and the rates and charges provided for in the Pricing Attachment. Verizon shall provide access to Line Splitting in accordance with, but only to the extent required by, the Federal Unbundling Rules.

4.3 Any Line Splitting between Neutral Tandem and another CLEC shall be accomplished by prior negotiated arrangement between Neutral Tandem and the other CLEC. Neutral Tandem shall give Verizon written notice of this arrangement through the Verizon Partner Solutions Local Service Customer Profile Form (formerly referred to as the Verizon Wholesale Local Service Customer Profile Form) on the Verizon Partner Solutions website (formerly referred to as the Verizon wholesale website), or such other electronic notice mechanism that Verizon may make available, at least thirty (30) days prior to placing an order for a Line Splitting arrangement with such other CLEC. The other CLEC must have an interconnection agreement with Verizon that permits it to engage in Line Splitting with Neutral Tandem. The VLEC shall be responsible for all rates and charges associated with the subject Loop as well as rates and charges associated with the DLEC's use of the high frequency portion of the Loop, including, but not limited to, service order charges, provisioning and installation charges, central office wiring, loop qualification charges, and OSS charges.

4.4 In order to facilitate Neutral Tandem's engaging in Line Splitting pursuant to this Section 4, Neutral Tandem may order for use in a Line Splitting arrangement, those Network Elements, Combinations, Collocation arrangements, services, facilities, equipment and arrangements, appropriate for Line Splitting, that are offered to Neutral Tandem by Verizon under the other sections of this Agreement. Such Network Elements, Combinations, Collocation arrangements, services, facilities, equipment and arrangements, will be provided to Neutral Tandem in accordance with, and subject to, the rates and charges and other provisions of this Agreement and Verizon's applicable Tariffs. Verizon shall be obligated to provide Network Elements, Combinations, Collocation arrangements, services, facilities, equipment and arrangements, for Line Splitting only to the extent required by the Federal Unbundling Rules.

4.5 Neutral Tandem and/or the other participating CLEC shall provide any splitters and/or Digital Subscriber Line Access Multiplexers used in a Line Splitting arrangement.

4.6 The standard provisioning interval for the Line Splitting arrangement shall be as set out in the Verizon Product Interval Guide; provided that the standard provisioning interval for a Line Splitting arrangement shall not exceed the shortest of the following intervals: (1) the standard provisioning interval for a Line Splitting arrangement if stated in an applicable Verizon Tariff; or, (2) the standard provisioning interval for a Line Splitting arrangement, if any, established in accordance with the Federal Unbundling Rules. The standard provisioning interval for a Line Splitting arrangement shall commence only after any required engineering and conditioning tasks have been completed. The standard provisioning interval shall not apply where a Line and Station Transfer is performed.

4.7 Verizon shall not be liable for any claims, damages, penalties, liabilities or the like of any kind for disruptions to either Neutral Tandem's or the other CLEC's respective voice or data services over a Line Splitting arrangement.

5. [This Section Intentionally Left Blank]

6. Sub-Loop

Subject to the conditions set forth in Section 1 of this Attachment and upon request by Neutral Tandem, Verizon shall allow Neutral Tandem to access Sub-Loops unbundled from local switching and transport, in accordance with the terms of this Section 6 and the rates and charges set forth in the Pricing Attachment. Verizon shall allow Neutral Tandem access to Sub-Loops in accordance with, but only to the extent required by, the Federal Unbundling Rules. The available Sub-Loop types are as set forth below.

6.1 Unbundled Sub-Loop Arrangement– Distribution (USLA).

Subject to the conditions set forth in Section 1 of this Attachment and upon request by Neutral Tandem, Verizon shall provide Neutral Tandem with access to a Sub-Loop Distribution Facility in accordance with, and subject to, the terms and provisions of this Section 6.1, the rates set forth in the Pricing Attachment, and the rates, terms and conditions set forth in Verizon's applicable Tariffs. Verizon shall provide Neutral Tandem with access to a Sub-Loop Distribution Facility in accordance with, but only to the extent required by, the Federal Unbundling Rules.

6.1.1 Neutral Tandem may request that Verizon reactivate (if available) an unused drop and NID or provide Neutral Tandem with access to a drop

and NID that, at the time of Neutral Tandem's request, Verizon is using to provide service to the Customer (as such term is hereinafter defined).

6.1.2 Upon site-specific request, Neutral Tandem may obtain access to the Sub-Loop Distribution Facility at a technically feasible access point located near a Verizon remote terminal equipment enclosure at the rates and charges provided for in the Pricing Attachment. It is not technically feasible to access the Sub-Loop Distribution Facility if a technician must access the facility by removing a splice case to reach the wiring within the cable. Neutral Tandem may obtain access to a Sub-Loop Distribution Facility through any method required by the Federal Unbundling Rules, in addition to existing methods such as from a Telecommunications outside plant interconnection cabinet (TOPIC) or, if Neutral Tandem is collocated at a remote terminal equipment enclosure and the FDI for such Sub-Loop Distribution Facility is located in such enclosure, from the collocation arrangement of Neutral Tandem at such terminal. If Neutral Tandem obtains access to a Sub-Loop Distribution Facility from a TOPIC, Neutral Tandem shall install a TOPIC on an easement or Right of Way obtained by Neutral Tandem within 100 feet of the Verizon FDI to which such Sub-Loop Distribution Facility is connected. A TOPIC must comply with applicable industry standards. Subject to the terms of applicable Verizon easements, Verizon shall furnish and place an interconnecting cable between a Verizon FDI and a Neutral Tandem TOPIC and Verizon shall install a termination block within such TOPIC. Verizon shall retain title to and maintain the interconnecting cable. Verizon shall not be responsible for building, maintaining or servicing the TOPIC and shall not provide any power that might be required by Neutral Tandem for any of Neutral Tandem's electronics in the TOPIC. Neutral Tandem shall provide any easement, Right of Way or trenching or supporting structure required for any portion of an interconnecting cable that runs beyond a Verizon easement.

6.1.3 Neutral Tandem may request from Verizon by submitting a loop make-up engineering query to Verizon, and Verizon shall provide to Neutral Tandem, the following information regarding a Sub-Loop Distribution Facility that serves an identified Customer: the Sub-Loop Distribution Facility's length and gauge; whether the Sub-Loop Distribution Facility has loading and bridged tap; the amount of bridged tap (if any) on the Sub-Loop Distribution Facility; and, the location of the FDI to which the Sub-Loop Distribution Facility is connected.

6.1.4 To order access to a Sub-Loop Distribution Facility from a TOPIC, Neutral Tandem must first request that Verizon connect the Verizon FDI to which the Sub-Loop Distribution Facility is connected to a Neutral Tandem TOPIC. To make such a request, Neutral Tandem must submit to Verizon an application (a "Sub-Loop Distribution Facility Interconnection Application") that identifies the FDI at which Neutral Tandem wishes to access the Sub-Loop Distribution Facility. A Sub-Loop Distribution Facility Interconnection Application shall state the location of the TOPIC, the size of the interconnecting cable and a description of the cable's supporting structure. A Sub-Loop Distribution Facility Interconnection Application shall also include a five-year forecast of Neutral Tandem's demand for access to Sub-Loop Distribution Facilities at the requested FDI. Neutral Tandem must

submit the application fee set forth in the Pricing Attachment attached hereto and Verizon's applicable Tariffs (a "Sub-Loop Distribution Facility Application Fee") with Sub-Loop Distribution Facility Interconnection Application. Neutral Tandem must submit Sub-Loop Interconnection Applications to:

Collocation Applications
Verizon
Room 503
185 Franklin Street
Boston, MA 02110
E-Mail: collocation.applications@Verizon.com

6.1.5 Within sixty (60) days after it receives a complete Sub-Loop Distribution Facility Interconnection Application for access to a Sub-Loop Distribution Facility and the Sub-Loop Distribution Facility Application Fee for such application, Verizon shall provide to Neutral Tandem a work order that describes the work that Verizon must perform to provide such access (a "Sub-Loop Distribution Facility Work Order") and a statement of the cost of such work (a "Sub-Loop Distribution Facility Interconnection Cost Statement").

6.1.6 Neutral Tandem shall pay to Verizon fifty percent (50%) of the cost set forth in a Sub-Loop Distribution Facility Interconnection Cost Statement within sixty (60) days of Neutral Tandem's receipt of such statement and the associated Sub-Loop Distribution Facility Work Order, and Verizon shall not be obligated to perform any of the work set forth in such order until Verizon has received such payment. A Sub-Loop Distribution Facility Interconnection Application shall be deemed to have been withdrawn if Neutral Tandem breaches its payment obligation under this Section. Upon Verizon 's completion of the work that Verizon must perform to provide Neutral Tandem with access to a Sub-Loop Distribution Facility, Verizon shall bill Neutral Tandem, and Neutral Tandem shall pay to Verizon, the balance of the cost set forth in the Sub-Loop Distribution Facility Interconnection Cost Statement for such access.

6.1.7 After Verizon has completed the installation of the interconnecting cable to a Neutral Tandem TOPIC and Neutral Tandem has paid the full cost of such installation, Neutral Tandem can request the connection of Verizon Sub-Loop Distribution Facilities to the Neutral Tandem TOPIC. At the same time, Neutral Tandem shall advise Verizon of the services that Neutral Tandem plans to provide over the Sub-Loop Distribution Facility, request any conditioning of the Sub-Loop Distribution Facility and assign the pairs in the interconnecting cable. Neutral Tandem shall run any crosswires within the TOPIC.

6.1.8 If Neutral Tandem requests that Verizon reactivate an unused drop and NID, then Neutral Tandem shall provide dial tone (or its DSL equivalent) on the Neutral Tandem side of the applicable Verizon FDI at least twenty-four (24) hours before the due date. On the due date, a Verizon technician will run the appropriate cross connection to connect the Verizon Sub-Loop Distribution Facility to the Neutral Tandem dial tone or equivalent from the TOPIC. If Neutral Tandem requests that Verizon provide Neutral Tandem with access to a Sub-Loop

Distribution Facility that, at the time of Neutral Tandem's request, Verizon is using to provide service to a Customer, then, after Neutral Tandem has looped two interconnecting pairs through the TOPIC and at least twenty four (24) hours before the due date, a Verizon technician shall crosswire the dial tone from the Verizon central office through the Verizon side of the TOPIC and back out again to the Verizon FDI and Verizon Sub-Loop Distribution Facility using the "loop through" approach. On the due date, Neutral Tandem shall disconnect Verizon's dial tone, crosswire its dial tone to the Sub-Loop Distribution Facility and submit Neutral Tandem's LNP request.

6.1.9 Verizon will not provide access to a Sub-Loop Distribution Facility if Verizon is using the loop of which the Sub-Loop Distribution Facility is a part to provide line sharing service to another CLEC or a service that uses derived channel technology to a Customer unless such other CLEC first terminates the Verizon-provided line sharing or such Customer first disconnects the service that utilizes derived channel technology.

6.1.10 Verizon shall provide Neutral Tandem with access to a Sub-Loop Distribution Facility in accordance with negotiated intervals

6.1.11 Verizon shall repair and maintain a Sub-Loop Distribution Facility at the request of Neutral Tandem and subject to the time and material rates set forth in Pricing Attachment and the rates, terms and conditions of Verizon's applicable Tariffs. Neutral Tandem accepts responsibility for initial trouble isolation for Sub-Loop Distribution Facilities and providing Verizon with appropriate dispatch information based on its test results. If (a) Neutral Tandem reports to Verizon a Customer trouble, (b) Neutral Tandem requests a dispatch, (c) Verizon dispatches a technician, and (d) such trouble was not caused by Verizon Sub-Loop Distribution Facility facilities or equipment in whole or in part, Neutral Tandem shall pay Verizon the charges set forth in the Pricing Attachment and Verizon's applicable Tariffs for time associated with said dispatch. In addition, these charges also apply when the Customer contact as designated by Neutral Tandem is not available at the appointed time. If as the result of Neutral Tandem instructions, Verizon is erroneously requested to dispatch to a site on Verizon company premises ("dispatch in"), the charges set forth in Pricing Attachment and Verizon's applicable Tariffs will be assessed per occurrence to Neutral Tandem by Verizon. If as the result of Neutral Tandem instructions, Verizon is erroneously requested to dispatch to a site outside of Verizon company premises ("dispatch out"), the charges set forth in Pricing Attachment and Verizon's applicable Tariffs will be assessed per occurrence to Neutral Tandem by Verizon.

6.2 [Intentionally Left Blank].

6.3 Collocation in Remote Terminals.

To the extent required by Applicable Law, Verizon shall allow Neutral Tandem to collocate equipment in a Verizon remote terminal equipment enclosure in accordance with, and subject to, the rates, terms and conditions set forth in the Collocation Attachment and the Pricing Attachment.

7. Sub-Loop for Multiunit Tenant Premises Access

[Intentionally Left Blank]:

8. Dark Fiber Transport and Transitional Provision of Embedded Dark Fiber Loops

8.1 Subject to the conditions set forth in Section 1 of this Attachment and upon request by Neutral Tandem, Verizon shall provide Neutral Tandem with access to unbundled Dark Fiber Transport in accordance with, and subject to, the rates, terms and conditions provided in the Pricing Attachment and rates, terms and conditions of Verizon's applicable Tariffs. Verizon shall not be required to provide, and Neutral Tandem shall not request or obtain, unbundled access to any dark fiber facility that does not meet the definition of Dark Fiber Transport (except to the extent Verizon is required to provide Neutral Tandem with unbundled access to Neutral Tandem's embedded base of Dark Fiber Loops under Section 8.3 below). For the avoidance of any doubt, notwithstanding any other provision of this Agreement, a Verizon Tariff, or otherwise, Verizon shall not be required to provide, and Neutral Tandem shall not request or obtain, Dark Fiber Transport that does not connect a pair of Verizon UNE Wire Centers. Access to unbundled Dark Fiber Transport will be provided by Verizon only where existing facilities are available except as provided in Section 17 below. Access to Dark Fiber Transport will be provided in accordance with, but only to the extent required by, the Federal Unbundling Rules. Dark Fiber Transport consists of Verizon optical transmission facilities without attached multiplexers, aggregation or other electronics. To the extent Verizon's Dark Fiber Transport contains any lightwave repeaters (e.g., regenerators or optical amplifiers) installed thereon, Verizon shall not remove the same. Except as otherwise required by the Federal Unbundling Rules, the following terms and conditions apply to Verizon's Dark Fiber Transport offerings.

8.2 In addition to the other terms and conditions of this Agreement, the following terms and conditions shall apply to Dark Fiber Transport:

8.2.1 [Intentionally Left Blank].

8.2.2 Neutral Tandem may access Dark Fiber Transport only at a pre-existing Verizon accessible terminal of such Dark Fiber Transport, and Neutral Tandem may not access Dark Fiber Transport at any other point, including, but not limited to, a splice point or case. Dark Fiber Transport is not available to Neutral Tandem unless such Dark Transport is already terminated on an existing Verizon accessible terminal. Unused fibers located in a cable vault or a controlled environment vault, manhole or other location outside the Verizon UNE Wire Center, and not terminated to a fiber patch panel, are not available to Neutral Tandem.

8.2.3 Except if and, to the extent required by, the Federal Unbundling Rules and Section 17 below, Verizon will not perform splicing (e.g., introduce additional splice points or open existing splice points or cases) to accommodate Neutral Tandem's request.

8.2.4 Verizon shall perform all work necessary to install a cross connect or a fiber jumper from a Verizon accessible terminal to a Neutral Tandem collocation arrangement.

8.2.5 A "Dark Fiber Inquiry Form" must be submitted prior to submitting an ASR. Upon receipt of Neutral Tandem's completed Dark Fiber Inquiry Form, Verizon will initiate a review of its cable records to determine whether Dark Fiber Transport may be available between the locations